Our ref: KON-1803

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: W. SATAKE		Group : 1752
Serial No. : 10/606,490		
Filed : June 26, 2003		Examiner: H. Van Le
Title : CONCENTRATED COLOR DEVELOPER...METHOD BY USE THEREOF		Dated :

DECLARATION

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

S i r:

I, Wataru Satake, hereby declare and say as follows:

1. I am the sole inventor of the present Application.

2. I earned a Master's degree in Science from Kanazawa University in March 1989. Since April 1989, I have been employed by Konica Corporation, the owner of the present Application. During my employment at Konica, I have engaged in the research and study of silver halide photographic materials and photographic processing in the Research and Development Laboratory of Konica Corporation.

3. I am aware that this Application has been rejected based on US 6,413,703 to Tappe. Tests have been performed and are reported herein in order to demonstrate the molar ratios of sodium to potassium ions or Tappe, the molar ratios of sodium to carbonate ions of Tappe, and that superior variations of oxidation-reduction potential and superior variations of gamma balance are obtained by adding a compound of Formulas (A-I)-(A-IV) of the present invention to a one-part photographic developing concentrate having a molar ratio of sodium ions to potassium ions of at least 3 and a molar ratio of sulfate ions to carbonate ions of at least 0.25 compared

to Tappe. These tests have been performed either by myself or under my direct supervision and control.

4. Examples 1-10 of Tappe were prepared in accordance with the teachings of Tappe and were evaluated in accordance with the present invention (page 38, paragraph 3 to page 39, paragraph 4) to determine the molar ratio of sodium to potassium ions and the molar ratio of sulfate to carbonate ions. The results of these evaluations are illustrated in Table A.

Table A

Sample	Na/K At least 3	CD-3		K_2CO_3 (g)	Na_2CO_3 (g)	(mol)	SO_4/CO_3 At least 0.25	Chelating agent
		(g)	(mol)					
Ex 1	0%	50	0.1146	60		0.4348	0.3953	EDTA
Ex 2	0%	50	0.1146	60		0.4348	0.3953	EDTA
Ex 3	Infinity: No K ion	50	0.1146		60	0.5660	0.3036	Polymaleic acid
Ex 4	Infinity: No K ion	50	0.1146		60	0.5660	0.3036	EDTA
Ex 5	0%	70	0.1604	165		1.1957	0.2012	EDTA
Ex 6	Infinity: No K ion	70	0.1604		130	1.2264	0.1962	EDTA
Ex 7	0%	70	0.1604	165		1.1957	0.0000	EDTA
Ex 8	0%	70	0.1604	165		1.1957	0.0000	DTPA
Ex 9	0%	43.5	0.0997	165		1.1957	0.0000	EDTA
Ex 10	0%	66	0.1512	240		1.7391	0.0000	EDTA

5. As shown in Table A, only Example 3 and Example 4 of Tappe meet the sodium to potassium ion molar ratio and only Examples 1-4 meet the sulfate to carbonate ion molar ratio.

6. As shown in Table A, Example 3 and Example 4 of Tappe have a molar ratio of sodium to potassium ions and a molar ratio of sulfate to carbonate ions within the range of the present invention. Examples 1, 2 and 5-10 of Tappe have a molar ratio of sodium to potassium ions and a molar ratio of sulfate to carbonate ions outside the range of the present invention.

7. Examples 1-10 of Tappe were further evaluated in accordance with the present invention to determine the variation of oxidation-reduction potential and the variation of gamma balance. The results of these evaluations are illustrated in Table B.

Table B

Sample	Effect	
	ΔE variation (%)	Gamma balance change rate (%)
Ex 1	11.5	15.1
Ex 2	12.0	14.6
Ex 3	8.7	9.2
Ex 4	9.0	9.4
Ex 5	12.2	14.9
Ex 6	13.0	13.7
Ex 7	12.3	12.9
Ex 8	11.6	13.3
Ex 9	11.9	14.4
Ex 10	12.1	15.4

8. As shown in Table B, Example 3 and Example 4 of Tappe, having a molar ratio of sodium to potassium ions and a molar ratio of sulfate to carbonate ions within the claimed range, are superior to Examples 1, 2 and 5-10 of Tappe, having a molar ratio of sodium to potassium ions and a molar ratio of sulfate to carbonate ions outside the claimed range. Thus, Example 3 and Example 4 of Tappe were determined to be most similar to the present invention for comparison purposes.

9. Example 3 and Example 4 of Tappe were compared to Examples 2-5 to 2-12 in Table 2 of the present invention. Examples 2-5 to 2-12 of the present invention contain a chelating agent of formulas (A-I)-(A-IV). Example 3 of Tappe contains polymaleic acid as the chelating agent while Example 4 of Tappe contains EDTA as the chelating agent.

10. I confirm that Example 1 and Example 2 of pages 36-42 the Application were performed by myself or under my direct supervision and control. These Examples are incorporated herein by reference for purposes of comparison to Tappe.

11. Each of Examples 2-5 to 2-12 of the present invention are superior to Example 3 and Example 4 of Tappe in terms of variation of oxidation-reduction potential and variation of gamma balance. For instance, each of Examples 2-5 to 2-12 of the present invention have a variation of oxidation-reduction potential and a variation of gamma balance of less than 8.0, while Example 3 and Example 4 of Tappe have a variation of

oxidation reduction potential and a variation of gamma balance of at least greater than 8.6. Thus, this comparison adequately demonstrates the enhanced effects that are obtained by adding a compound of Formulas (A-I)-(A-IV) of the present invention to a one-part photographic developing concentrate having a molar ratio of sodium ions to potassium ions of at least 3 and a molar ratio of sulfate ions to carbonate ions of at least 0.25.

12. I am of the opinion that these results are surprising and unexpected to one of skill in the art based on the teachings of Tappe.

It is declared by undersigned that all statements made herein of undersigned's own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements and the like so made are punishable by fine or imprisonment, or both, under section 18 U.S. Code 1001, and that such willful false statements may jeopardize the validity of this Application or any patent issuing thereon.

Wataru Satake

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Dated: This 30th day of January, 2004.